Preparation of Lime from Mussel Shell Waste

Mussels *(Perna viridis)* grow in abundance on the rocky structures in the estuaries of the Malabar coast especially from Calicut and towards north of Calicut. Recently Muraleedharan *et al.*, (1979) and Muraleedharan *et al.* (1982) have developed technologies to process the meat of mussels but so far no method is known to utilize the mussel shells presently wasted. The present communication describes a simple process evolved by the authors for the first time in India to convert the mussel shells into lime.

A thick layer of charcoal is first spread on the floor of the kiln and is ignited by blowing air from below. A good mixture of the shell and powdered charcoal is then fed in small lots and are ignited till all the carbon got oxidised. The material cooled overnight. The lime is then taken out and filled in bags.

The material is found to contain 100% CaO. The yield and cost of production are given below:

	Rs.
Cost of raw material per ton	80
Cost of charcoal @ Rs. 33/ 6 bags	198
Labour and transporting charges	100
Overhead expenses	22
Total	400
Yield of quicklime 800 kg (80% of the raw material)	
Cost of 800 kg of quicklime @ Rs. 90/quintal	720
Profit	320 (80%)

The lime so prepared was tried for white washing and plastering. The results were comparable to those obtained using conventional materials.

References

Muraleedharan, V., Unnikrishan Nair, T. S. & George Joseph, K. (1979) *Fish. Technol.* **16,** 29

Muraleedharan, V., George Joseph, K. & Devadasan, K. (1982) *Fish. Technol.* **19,** 41

Calicut Research Centre of
Central Institute of
Fisheries Technology, Calicut - 673 005

N. KALAIMANI
V. MURALEEDHARAN
T. S. UNNIKRISHNAN NAIR &
K. GEORGE JOSEPH